

CLAIMS

1. Module (22) for heating a preform (10), especially a plastic container preform, which comprises a longitudinal heating tunnel (24) bounded transversely by the mutually parallel 5 longitudinal vertical internal faces (36, 38) of two walls (40, 42), one a heating wall (40), being equipped with a heating system (46), and the other an aerated wall (42), having aeration orifices (50) that are intended to let the air blown by at least one blower (52) pass through them transversely from the upstream, outside 10 the heating tunnel (24), to the downstream, inside the latter, and in which module a first portion (12, 14) of the preform (10) is heated in the heating tunnel (24), while a second portion (16) of the preform (10) is held outside the heating tunnel (24) through a longitudinal opening (41) made between the longitudinal edges of 15 the walls (36, 38) of the heating tunnel (24), of the type in which the blower (52) includes a longitudinal deflector (62) that deflects a portion of the air blown transversely towards the second portion (16) of the preform (10) so as to prevent the constituent material of said lower portion (16) from being heated up to its softening 20 point,

characterized in that the upstream end (64) of the deflector (62) is aerodynamically profiled.

2. Module (22) according to the preceding claim, characterized in that the deflector (62) is profiled so that the 25 upstream end (62) has a point directed upstream, the thickness of the deflector (62) increasing towards the downstream.

3. Module (22) according to either of the preceding claims, characterized in that the downstream end (66) of the deflector (62) is aerodynamically profiled.

30 4. Module (22) according to the preceding claim, characterized in that the deflector (62) is profiled so that its thickness progressively decreases as far as its downstream end, which forms a point directed downstream.

5. Module (22) according to any one of the preceding claims, characterized in that the deflector (62) is a heat shield that prevents heat produced by the heating system (46) from communicating with the second portion (16) of the preform (10) through the opening (41) in the heating tunnel (24).

6. Module (22) according to the preceding claim, characterized in that the deflector (62) includes an air-conditioning system (68).

10 7. Module (22) according to any one of the preceding claims, characterized in that the downstream end (64) of the deflector (62) is mounted so as to pivot about a longitudinal axis so as to regulate the flow of air blown towards the aerated wall (42).

15 8. Module (22) according to any one of the preceding claims, characterized in that the opening (41) is made between the lower longitudinal edges of the walls (36, 38) of the heating tunnel (24) and in that the blower (52) includes a lower air outlet flap (70) which is placed beneath the deflector (62) and the upstream end (72) of which is mounted so as to pivot about a 20 longitudinal axis (C) so as to guide the air right to the second portion (16) of the preform (10), below the longitudinal opening (41) made between the lower longitudinal edges of the walls (36, 38) of the heating tunnel (24).

25 9. Module (22) according to any one of the preceding claims, characterized in that the opening (41) is made between the upper longitudinal edges of the walls (36, 38) of the heating tunnel (24) and in that the blower (52) includes an upper air outlet flap (70) which is placed above the deflector (62) and the upstream end (72) of which is mounted so as to pivot about a 30 longitudinal axis (C) so as to guide the air right to the second portion (16) of the preform (10), above the longitudinal opening (41) made between the upper longitudinal edges of the walls (36, 38) of the heating tunnel (24).

10. Oven for heating a preform (10), which includes a plurality of heating modules (22) according to any one of Claims 1 to 9 that are aligned so as to form a tunnel (24).